

**REMARKS**

Claims 2, 4, 6, 8, 10 and 12 are pending in this application. By this Amendment, claim 2 is amended. No new matter is added by this amendment. Claim 15 is canceled without prejudice to or disclaimer of the subject matter recited therein. Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments place the application in condition for allowance for the reasons discussed herein; and do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution. Entry of the amendments is thus respectfully requested.

The courtesies extended to Applicants' representative by Examiners Savla and Elmore at the interview held September 24, 2007, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

The Office Action rejects claims 2, 4 and 15 under 35 U.S.C §103(a) as being unpatentable over JP 2001-236790 to Yoshizawa et al. (hereinafter "Yoshizawa") in view of U.S. Patent No. 6,493,793 to Pereira et al. (hereinafter "Pereira") and U.S. Patent Application Publication No. 2002/122337 to Kanazawa et al. (hereinafter "Kanazawa"); rejects claims 6 and 8 under 35 U.S.C. §103(a) as being unpatentable over Yoshizawa in view of Kanazawa and Pereira and further in view of U.S. Patent No. 6,493,812 to Lyon; rejects claim 10 under 35 U.S.C. §103(a) as being unpatentable over Yoshizawa in view of Kanazawa and Pereira and further in view of U.S. Patent No. 6,393,514 to Khanna et al. (hereinafter "Khanna"); and rejects claim 12 under 35 U.S.C. §103(a) as being unpatentable over Yoshizawa in view of

Pereira and Kanazawa and further in view of Lyon and Khanna. Applicants respectfully traverse these rejections.

The result signal  $OROUT_{i+1}$  of Kanazawa does not teach or suggest outputting a signal indicating that there is no hit entry in the CAM device. Kanazawa, in Figs. 3, 5 and 6 and paragraphs [0064] and [0081], teaches if there is a defective CAM, it is replaced with another CAM word using the spare CAM. As shown in Fig. 3, the CAM words P0 to P2 receives word selection signals for addresses L0 to L2 and the CAM words P4 to P7 for addresses L3 to L6. The search result output signal  $OROUT_{i+1}$  is outputted to the priority encoder 22 indicating the addresses for words P4 to P7. Additionally, the search result output signal  $OROUT_i$  is outputted to the priority encoder 22 indicating the addresses for words P0 to P2. Therefore, the priority encoder 22 does not know whether there is a defective CAM word, but instead only knows the search result for  $L_i$ . Thus, the search result signal  $OROUT_{i+1}$  does not teach outputting a signal indicating that there is no hit entry in the CAM device.

Furthermore, the Office Action asserts that Yoshizawa, Kanazawa and Pereira, either individually or in combination, teach or suggest all of the features recited in claim 2. However, the applied references do not teach or suggest a content addressable memory (hereinafter "CAM") device where if the CAM device does not include a physical bank assigned to the logical bank to be searched, "the logical bank-physical bank converter outputs a signal directly to the cascade circuit to inform that there is no physical bank assigned to the logical bank so that the cascade circuit generates one of a signal indicating that there is no hit entry in the CAM device," as recited in newly amended claim 2.

Pereira, in col. 5, lines 59-60 and Fig. 2, teaches that the match flag logic 205, which monitors the match signals and generates  $/MF\_int$ , is provided together with the priority encoder 207. Thus, when combining the references the search result signal  $OROUT_{i+1}$  of

Kanazawa would be outputted to the match flag logic 205. Thus, the match flag logic 205 monitors the search result output signals  $OROUT_{i+1}$  and generates the  $/MF\_int$  signal to the cascade logic CKT 204. Thus, the signal  $OROUT_{i+1}$  of Kanazawa is not outputted directly to the cascade logic CKT 204 of Pereira.

Therefore, the applied references, individually or in combination, do not teach or suggest "the logical bank-physical bank converter outputs a signal directly to the cascade circuit to inform that there is no physical bank assigned to the logical bank so that the cascade circuit generates one of a signal indicating that there is no hit entry in the CAM device," as recited in amended claim 2.

Yoshizawa, Lyon and Khanna fail to teach or suggest the above feature, and therefore, fail to make up for the above noted deficiencies of Pereira.

For at least the reasons above, the applied references, either individually or in combination, cannot reasonably be considered to teach, or to have suggested, all of the features recited in independent claim 2. Further, claims 4, 6, 8, 10 and 12 would also not have been suggested by the applied references for at least the respective dependence of these claims on allowable independent claim 2, as well as for the separately patentable subject matter that each of these claim recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 2, 4, 6, 8, 10 and 12 under 35 U.S.C. §103(a) are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 2, 4, 6, 8, 10 and 12 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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